## Amendments to the Claims

1-42. cancelled

43. (previously presented) A pre-cursor to a semiconductor device containing at least one area of sacrificial material made in accordance with a method comprising the steps of:

(A) forming a patterned layer of sacrificial material on a substrate corresponding to a pattern of one or more gaps to be formed in the semiconductor structure;

(B) depositing a second material on the substrate within regions bordered by the sacrificial material with the second material being formed with a height less than the height of the adjacent sacrificial material; and

(C) forming an overcoat layer of material overlying the patterned layer of sacrificial material and the second material in the regions bordered by the sacrificial material, the overcoat layer having portions thereof overlying the second material in respective said regions bordered by the sacrificial material, and said portions extending below the height of the adjacent sacrificial material;

whereby the height of the one or more areas of sacrificial material exceeds the height of the one or more areas of second material.

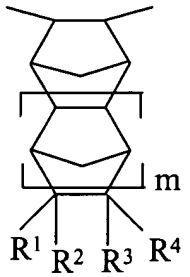
44. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 43, wherein step (B) includes using a conductive material to form conductive leads on opposite sides of portions of the sacrificial material.

45. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 43, wherein the sacrificial material is a cyclic olefin.

46. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 45, wherein the cyclic olefin is a dicyclic olefin.

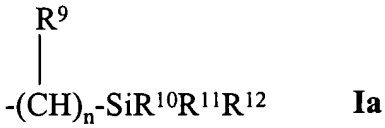
47. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 43, wherein the sacrificial material is a norbornene-type polymer.

48. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 47, wherein the norbornene-type polymer comprises repeat units of the general formula:




I

wherein $R^1$ and $R^4$ independently represent hydrogen or linear or branched ($C_1$ to $C_{20}$) alkyl; $R^2$ and $R^3$ independently represent hydrogen, linear or branched ($C_1$ to $C_{20}$) alkyl or the groups:

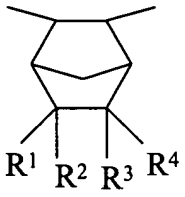



Ia

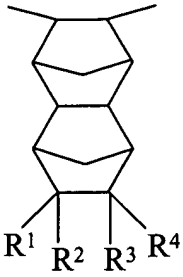
$R^9$ independently is hydrogen, methyl, or ethyl; $R^{10}$, $R^{11}$, and $R^{12}$ independently represent linear or branched ($C_1$ to $C_{20}$) alkyl, linear or branched ($C_1$ to $C_{20}$) alkoxy, linear or branched ($C_1$ to $C_{20}$) alkyl carbonyloxy, and substituted or unsubstituted ($C_6$ to $C_{20}$) aryloxy; m is a number from 0 to 4; and n is a number from 0 to 5; and at least one of substituents $R^2$ and $R^3$ is selected from the silyl group represented by the formula set forth under **Ia**.

49. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 48, wherein in Formula **I** above, m is preferably 0 or 1 as represented by structures **Ib** and **Ic**, respectively:

**Ib**

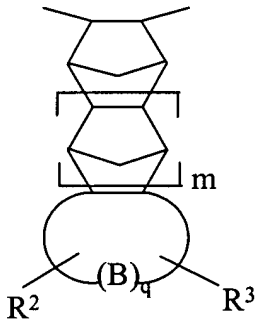



**Ic**



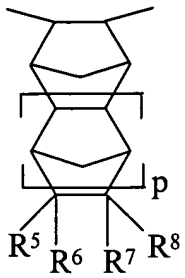

wherein $R^1$ to $R^4$ are as previously defined and at least one of $R^2$ and $R^3$ is a silyl substituent represented by **Ia**.

50. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 48, wherein $R^1$ and $R^4$ taken together with the two ring carbon atoms to which they are attached comprise a repeat unit of the following structure:




wherein B is a methylene group, q is a number from 2 to 6, and $R^2$ and $R^3$ are as defined above.

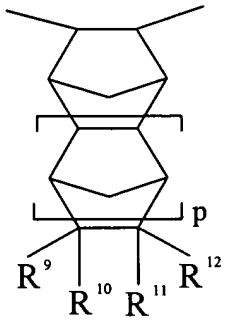
51. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 48, wherein the norbornene-type polymer further comprises hydrocarbyl substituted polycyclic repeating units selected from units represented by Formula **II** below:




II

wherein $R^5$, $R^6$, $R^7$, and $R^8$ independently represent hydrogen, linear and branched ($C_1$ to $C_{20}$) alkyl, hydrocarbyl substituted and unsubstituted ($C_5$ to $C_{12}$) cycloalkyl, hydrocarbyl substituted and unsubstituted ($C_6$ to $C_{40}$) aryl, hydrocarbyl substituted and unsubstituted ($C_7$ to $C_{15}$) aralkyl, ($C_3$ to $C_{20}$) alkynyl, linear and branched ($C_3$ to $C_{20}$) alkenyl, or vinyl; any of $R^5$ and $R^6$ or $R^7$ and $R^8$ can be taken together to form a ($C_1$ to $C_{10}$) alkylidenyl group, $R^5$ and $R^8$ when taken with the two ring carbon atoms to which they are attached can represent saturated and unsaturated cyclic groups containing 4 to 12 carbon atoms or an aromatic ring containing 6 to 17 carbon atoms; and p is 0, 1, 2, 3, or 4.

52. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 47, wherein the norbornene-type polymer comprises repeating units represented by Formula III below:



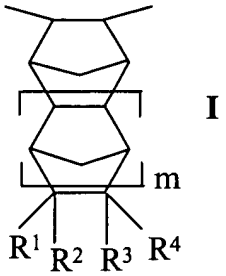

III

wherein $R^9$ to $R^{12}$ independently represent a polar substituent selected from the group: $-(A)_n-C(O)OR''$, $-(A)_n-OR''$, $-(A)_n-OC(O)R''$, $-(A)_n-OC(O)OR''$, $-(A)_n-C(O)R''$, $-(A)_n-$ $OC(O)C(O)OR''$, $-(A)_n-O-A'-C(O)OR''$, $-(A)_n-OC(O)-A'-C(O)OR''$, $-(A)_n-C(O)O-A'-C(O)OR''$, $-(A)_n-C(O)-A'-OR''$, $-(A)_n-C(O)O-A'-OC(O)OR''$,

$-(A)_n-C(O)O-A'-O-A'-C(O)OR''$, $-(A)_n-C(O)O-A'-OC(O)C(O)OR''$, $-(A)_n-C(R'')_2CH(R'')(C(O)OR'')$, and $-(A)_n-C(R'')_2CH(C(O)OR'')_2$; the moieties A and A' independently represent a divalent bridging or spacer radical selected from divalent hydrocarbon radicals, divalent cyclic hydrocarbon radicals, divalent oxygen containing radicals, and divalent cyclic ethers and cyclic diethers; and n is an integer 0 or 1.

53. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 47, wherein the norbornene-type polymer comprises copolymers comprising a combination of repeating units represented by Formulae **I** and **II**, Formulae **I** and **III**, Formulae **II** and **III** or Formulae **I**, **II** and **III**, where

Formula **I** is:



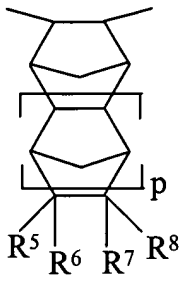

**I**

wherein $R^1$ and $R^4$ independently represent hydrogen or linear or branched ($C_1$ to $C_{20}$) alkyl; $R^2$ and $R^3$ independently represent hydrogen, linear or branched ($C_1$ to $C_{20}$) alkyl or the groups:


**Ia**

$R^9$ independently is hydrogen, methyl, or ethyl; $R^{10}$, $R^{11}$, and $R^{12}$ independently represent linear or branched ($C_1$ to $C_{20}$) alkyl, linear or branched ($C_1$ to $C_{20}$) alkoxy, linear or branched ($C_1$ to $C_{20}$) alkyl carbonyloxy, and substituted or unsubstituted ($C_6$ to $C_{20}$) aryloxy; m is a number from 0 to 4; and n is a number from 0 to 5; and at least one of substituents $R^2$ and $R^3$ is selected from the silyl group represented by the formula set forth under **Ia**;

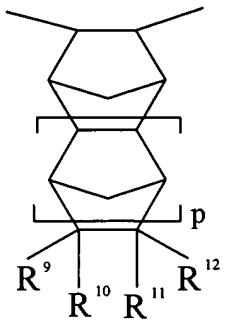
Formula **II** is




**II**

wherein $R^5$, $R^6$, $R^7$, and $R^8$ independently represent hydrogen, linear and branched ($C_1$ to $C_{20}$) alkyl, hydrocarbyl substituted and unsubstituted ($C_5$ to $C_{12}$) cycloalkyl, hydrocarbyl substituted and unsubstituted ($C_6$ to $C_{40}$) aryl, hydrocarbyl substituted and unsubstituted ($C_7$ to $C_{15}$) aralkyl, ($C_3$ to $C_{20}$) alkynyl, linear and branched ($C_3$ to $C_{20}$) alkenyl, or vinyl; any of $R^5$ and $R^6$ or $R^7$ and $R^8$ can be taken together to form a ($C_1$ to $C_{10}$) alkylidenyl group, $R^5$ and $R^8$ when taken with the two ring carbon atoms to which they are attached can represent saturated and unsaturated cyclic groups containing 4 to 12 carbon atoms or an aromatic ring containing 6 to 17 carbon atoms; and p is 0, 1, 2, 3, or 4; and

Formula **III** is




**III**

wherein $R^9$ to $R^{12}$ independently represent a polar substituent selected from the group: $-(A)_n$-C(O)OR″, $-(A)_n$-OR″, $-(A)_n$-OC(O)R″, $-(A)_n$-OC(O)OR″, $-(A)_n$-C(O)R″, $-(A)_n$- OC(O)C(O)OR″, $-(A)_n$-O-A′-C(O)OR″, $-(A)_n$-OC(O)-A′-C(O)OR″, $-(A)_n$-C(O)O-A′-C(O)OR″, $-(A)_n$-C(O)-A′-OR″, $-(A)_n$-C(O)O-A′-OC(O)OR″,

$-(A)_n-C(O)O-A'-O-A'-C(O)OR''$, $-(A)_n-C(O)O-A'-OC(O)C(O)OR''$, $-(A)_n-C(R'')_2CH(R'')(C(O)OR'')$, and $-(A)_n-C(R'')_2CH(C(O)OR'')_2$; the moieties A and A' independently represent a divalent bridging or spacer radical selected from divalent hydrocarbon radicals, divalent cyclic hydrocarbon radicals, divalent oxygen containing radicals, and divalent cyclic ethers and cyclic diethers; and n is an integer 0 or 1.

54. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 47, wherein the repeating units containing silyl functional groups comprise at least 1 mole percent of the polymer.

55. (currently amended) The pre-cursor to a semiconductor device as set forth in claim 54, wherein the repeating units containing silyl functional groups comprise at least 5 mole percent of the polymer.

56. (previously presented) A pre-cursor to a semiconductor device comprising:

a substrate;

a patterned layer of conductive material on the substrate,

a patterned layer of sacrificial material on the substrate, the patterned layer of sacrificial material being greater in height than the patterned layer of conductive material; and

an overcoat layer overlying the patterned layer of conductive material and the patterned layer of sacrificial material, the overcoat layer having a portion thereof overlying the conductive material in a region bordered by the sacrificial material, and said portion extending below the height of the adjacent sacrificial material.

57. (previously presented) The pre-cursor to a semiconductor device of claim 56, wherein the overcoat layer includes a dielectric material.

58. (previously presented) The pre-cursor to a semiconductor device as set forth in claim 43, wherein the sacrificial material can be decomposed into one or more gaseous decomposition products, and the overcoat layer includes a dielectric material

through which the one or more gaseous decomposition products can pass by diffusion under conditions not detrimental to the semiconductor device.

59. (previously presented) A semiconductor device comprising:

a substrate;

a patterned layer of conductive material disposed on the substrate and having a region thereof bordered by air gaps; and

an overcoat layer overlying the patterned layer of conductive material and the air gap, the overcoat layer having a portion thereof overlying the conductive material in the region bordered by the air gaps, and said portion extending below the height of the adjacent air gaps.

60. (previously presented) The semiconductor device of claim 59, wherein the conductive material in the region bordered by the air gaps forms a conductive lead of the semiconductor device.

61. (previously presented) The semiconductor device of claim 59, wherein the patterned layer of conductive material includes a plurality of regions bordered by respective air gaps, and the overcoat layer has portions thereof overlying the conductive material in the regions bordered by the air gaps, and said portions extend below the height of relatively adjacent air gaps.

62. (previously presented) The semiconductor device of claim 59, wherein the overcoat layer includes a dielectric material.

63. (previously presented) The semiconductor device of claim 59, wherein a surface of the conductive material adjacent a respective air gap is covered by a film of non-conducting material.

64. (previously presented) The semiconductor device of claim 63, wherein the non-conducting material is $SiO_2$ or $TiO_2$.

65. (previously presented) The semiconductor device of claim 63, wherein the film of non-conducting material controls corrosion of the surface of the conductive material covered by the film.

66. (previously presented) The semiconductor device of claim 63, wherein the film has a thickness of about 100 Å.

67. (previously presented) The semiconductor device of claim 59, wherein the conductive material does not extend below the relatively adjacent air gaps.

68. (previously presented) A semiconductor device comprising:

a substrate;

a patterned layer of conductive material disposed on the substrate and having a region thereof bordered by air gaps; and

an overcoat layer overlying the patterned layer of conductive material and the air gap, the overcoat layer having a portion thereof overlying the conductive material in the region bordered by the air gaps; and

wherein a surface of the conductive material adjacent a respective air gap is covered by a film of non-conducting material that does not extend over the conductive material beyond the air gap.

69. (previously presented) The semiconductor device of claim 68, wherein the non-conducting material is $SiO_2$ or $TiO_2$.

70. (previously presented) The semiconductor device of claim 68, wherein the film of non-conducting material controls corrosion of the surface of the conductive material covered by the film.

71. (previously presented) The semiconductor device of claim 68, wherein the film has a thickness of about 100 Å.

72. (previously presented) The semiconductor device of claim 59, wherein the semiconductor device is formed by removing a sacrificial material from a pre-cursor made in accordance with a method comprising the steps of:

(A) forming a patterned layer of the sacrificial material on a substrate corresponding to a pattern of air gaps to be formed in the semiconductor structure;

(B) depositing the conductive material on the substrate within regions bordered by the sacrificial material with the conductive material being formed with a height less than the height of the adjacent sacrificial material; and

(C) forming an overcoat layer of material overlying the patterned layer of sacrificial material and the conductive material in the regions bordered by the sacrificial material, the overcoat layer having portions thereof overlying the conductive material in respective said regions bordered by the sacrificial material, and said portions extending below the height of the adjacent sacrificial material, whereby the height of the one or more areas of sacrificial material exceeds the height of the one or more areas of second material.

73. (previously presented) The semiconductor device of claim 59, wherein the semiconductor device is formed by removing a sacrificial material from a pre-cursor comprising:

a substrate;

a patterned layer of conductive material on the substrate,

a patterned layer of the sacrificial material on the substrate, the patterned layer of sacrificial material being greater in height than the patterned layer of conductive material; and

an overcoat layer overlying the patterned layer of conductive material and the patterned layer of sacrificial material, the overcoat layer having a portion thereof overlying the conductive material in a region bordered by the sacrificial material, and said portion extending below the height of the adjacent sacrificial material.